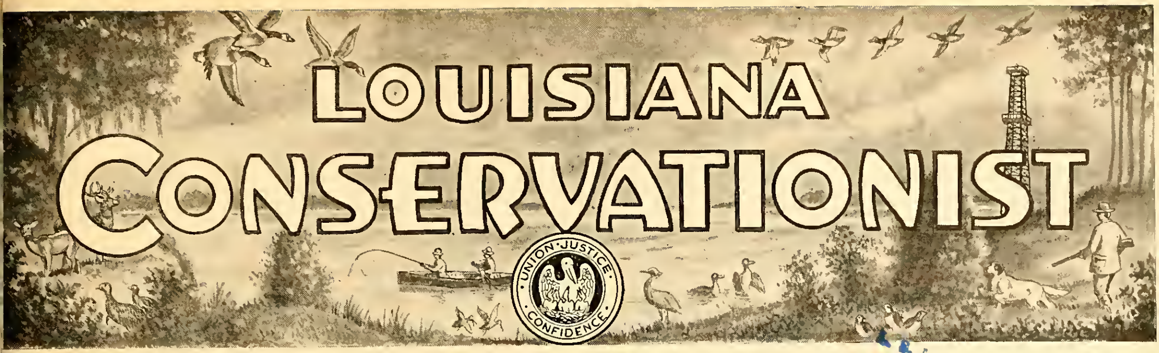

LOUISIANA CONSERVATIONIST

Volume 2 FEBRUARY, 1944 Number 3

A typical Louisiana moss worker.

(See story on "Louisiana's Lagniappe Crop", page 5).

Survey of War's Effects on Forestry Resources To Be Made in Louisiana

State Forester Massey H. An- erson announced last week that ie Louisiana Department of Con- ervation will cooperate with the merican Forestry Association in s appraisal of the war's effect n the forest resources of the ountry. In fact, if present plans nature, this state will be covered y a special survey project. Thus n the course of obtaining data or dealing with postwar recon- truction and forest management n a national scale, the survey vill yield information of particu- ar value to the people of this tate.

The fact-finding survey is being irected by John B. Woods of Portland, Oregon, timber valua- ion expert and formerly forester or the Lumber Code Authority f the old NIRA. He will head a taff of well known forest ap- raisal specialists. He is assisted y an advisory council of five members prominent in state and federal forestry, forest industry, and agriculture. The members of this committee are S. T. Dana, of Ann Arbor, Michigan, dean of the School of Forestry and Conservation, University of Michigan, and editor of the Journal of Forestry; William G. Howard, director of Lands and Forests, New York State Conservation Department; James W. Girard, Division of Forest Economics, U. S. Forest Service; William B. Greeley, former chief forester of the United States, now secretary-manager of the West Coast Lumbermen's Association; and E. O. Siecke, Nebraska farmer and forestry leader in Texas and other southern states.

Forest land conditions will be studied. The character and extent of growth and drain will be appraised, and the effects of war upon the over-all situation will be analyzed. "Much prewar information is available," says Mr. Anderson, "and this will be used."

Plans Progressing for New Orleans Convention of Interstate Oil Compact Commission To Be Held April 3, 4

Caddo Wildlife Unit Holds Its Annual Meeting

Dr. A. T. Johnson, president of Caddo chapter of the Wildlife Federation of Louisiana, was re-elected to the presiding post for another year at the meeting held last month at Caddo hotel. Other officers elected were T. M. Hope, vice-president; Fred Hamiter, secretary-treasurer.

Reporting on distribution of quail in Caddo parish, H. C. Bryant, of the Caddo police jury, told the assembly that the parish is not receiving the number of birds that had been expected. E. B. Johnson, of Longstreet, handling the distribution, stated that he has placed only 114 birds in Caddo, Bossier and De Soto parishes. He said that it is extremely difficult to get farmers who want quail placed on their farms, to agree that the lands will be open to hunting by all properly qualified sportsmen, a condition that is mandatory under the contract between the state conservation commission and the federal government. A resolution was adopted authorizing appointment of a special committee to be headed by H. C. Bryant to make recommendations for changing the contract to overcome present objections.

Speakers included Sheriff J. Howell Flournoy, State Senator Lloyd Hendrick, H. V. McConnell, supervisor of the conservation enforcement division in this district, and Arthur Birdwell, police jury member.

The meeting was concluded with a showing of technicolor movies of migratory bird feeding grounds in Canada.

Plans for the New Orleans meeting of the Interstate Oil Compact Commission April 3 and 4, are maturing rapidly, according to Conservation Commissioner Joseph L. McHugh, a member of the Executive Committee of the Compact and Chairman of the Arrangements Committee for the Louisiana gathering.

The meeting originally was scheduled for March 31 and April 1, but since these dates fell on a week end, the change in dates was necessary, due to crowded hotel conditions in the Crescent City.

Commissioner McHugh has appointed Daniel O. Payne as Secretary of the Louisiana Arrangements Committee for the meeting, with offices at 434 Canal Building. Mr. Payne will handle publicity, entertainment and reservations for the 300 or more visiting delegates. Gov. Schoeppel of Kansas is Chairman of the Interstate Oil Compact Commission and with Mr. McHugh and Hiram Dow of New Mexico, these three constitute the executive committee. Chas. L. Orr of Oklahoma City is Secretary of the Compact.

One of the Conservation Department's regular public hearings on a Louisiana oil field problem, at which Commissioner McHugh will preside, will be a feature of the two-day meeting, he announced. Showing of the Compact's motion picture "OIL FOR TOMORROW" depicting the growth of the oil industry from the crude equipment of the Drake well in Pennsylvania to the modern two-mile-deep wells of Coastal Louisiana and Texas, will be another highlight of the convention.

Harold L. Ickes, Secretary of the Interior and Petroleum Ad-

(Continued to Page 2, Column 1)

SAM H. JONES
Governor of Louisiana

JOS. L. McHUGH
Conservation Commissioner

LOUISIANA CONSERVATIONIST

Published Monthly in the interest of conservation by the
Louisiana Department of Conservation
126 Civil Courts Building, New Orleans, La.

ISAAC D. CHAPMAN
Editor

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Volume 2 **FEBRUARY, 1944** **Number**

Plans Under Way For Compact Meeting in State

(Continued from Page 1)

ministrator for War, has been extended a special invitation to address the meeting. His reply has not as yet been received. George A. Wilson, Director of PAW's Transportatoin Division, has likewise been asked to present a paper on "Act 157 of the 1940 Louisiana Legislature," of which Act he was a principal author.

Act 157 is Louisiana's oil and gas conservation statute, considered to be a model which other States have followed in setting up oil-regulatory authorities. Mr. Wilson was formerly General Counsel for the Conservation Department in New Orleans. He later became Counsel for Standard Oil Company of Louisiana in Shreveport and joined the PAW shortly after the United States entered the war. Prior to his connection with the Conservation Department, Mr. Wilson had been professor of oil law at Tulane University, New Orleans. He is a native of Mansfield, Louisiana, in the oil country, and received his legal training at Tulane. He is widely known as an oil authority and as a talented public speaker.

Another New Orleans speaker who will address the meeting is R. L. Keys, Assistant Division Manager of The Texas Company. His paper will be on the important subject of Recycling, an industry which looms large in Louisiana as the ever-increasing importance of energy-conservation brings the State's several large recycling plants into the limelight in connection with the manufacture of high-octane aviation gasoline.

A brilliant banquet at one of the largest hotels in New Orleans on Monday, April 3, will be followed by business sessions in the morning of the following day, the reading of committee reports, and the second day's activities will be climaxed by a sightseeing tour of New Orleans' port facilities and war installations.

A reception for the wives of the distinguished visitors is scheduled to be held at an exclusive New Orleans club, followed by a luncheon the second day of the meeting.

Many distinguished personages, high in State and Governmental circles are expected to attend the meeting, the second of its kind ever to be held in Louisiana. Governor Bricker of Ohio, an outstanding Republican presidential "threat" will represent his State. Other governors who will attend include Gov. Kerr of Oklahoma and Governor Sam Jones of Louisiana, who will extend the address of welcome on behalf of Louisiana. Governor Jones is responsible for Louisiana's membership in the Compact, which includes Texas, Illinois, Arkansas, Colorado, Kentucky, Louisiana, Michigan, New Mexico, New York, Ohio, Oklahoma and Pennsylvania.

Further details and the complete program for the meeting will be announced in the next issue of the Conservationist.

MAN'S NATURAL FRIEND

Frontiersmen settling in the deep woods telescoped in their own history the long economic struggle of mankind working its way from savagery to civilization. Except that they had guns, these backwoodsmen lived at first like the Indians. These pioneers learned anew, from their own experience, how the forest has been from the beginning of time not only man's best servant, but his best friend. It provided him shelter, fuel, weapons, tools, food, clothing—and still does.

Good News, Hunters—More Shells Likely For Next Season

According to a news release from the Kentucky Fish and Game Department, the shotgun shell situation for the 1944 hunting season has taken a favorable trend. Congressman Virgil Chapman of Kentucky, a member of the House Committee on Conservation of Natural Resources, advised the Kentucky Fish and Game Department that the U. S. Fish and Wildlife Service has set a goal of 240,000,000 shells for farmers and hunters for 1944. The normal prewar production was approximately 700,000,000 annually, but during the past season only 82,000,000 (less than one-seventh of the normal supply) were available.

Quoting from Congressman Chapman's letter, the release states, "Our committee conducted a hearing in which it was brought out that the inability to obtain a larger amount of ammunition last year was due partly to the slowness in placing orders, but to a greater extent to the inability to obtain brass, one of the most strategic metals for military purposes. The army has cancelled a number of contracts, and several plants have been closed. There is no powder shortage, and it is believed that a larger amount of brass and copper strips, in addition to steel strips, will be available to manufacture shells for the '44 season."

The request for 240,000,000 shells has been based on three things: the necessity of controlling wildlife damage to crops, the need for relaxation and recreation for some 13,000,000 citizens who purchase hunting licenses annually, and consideration of the wild game take which produced 255,000,000 pounds of meat during 1942.

DIRECTORY OF DIVISION HEADS AND OFFICIALS OF CONSERVATION DEPARTMENT

Jos. L. McHugh, Commissioner
Chas. E. Morefield,
Executive Assistant
H. M. Grode, Chief Accountant
J. N. Gowanloch,
Chief Biologist
Isaac D. Chapman,
Education and Publicity
J. G. Appel, Enforcement
Armand P. Daspit,
Fur and Refuge
Massey H. Anderson, Forestry
Dr. J. Huner,
Geological Survey
H. W. Bell, Minerals
J. N. McConnell,
Oysters and Waterbottoms
Wm. F. Chisholm,
Research and Statistics
James Brown,
Wildlife and Fisheries

TYPES OF VIOLATIONS WHIC WERE MADE DURING JANUARY

Commercial Fishing Illegal Tackle	
Hunting Without License	
Hunting at Night	
Hunting with Unplugged Gun	
Hunting Migratory Waterfowl Out of Season	
Exceeding Migratory Waterfowl Legal Limit	
Hunting Squirrel Out of Season	
Total	2

AGENTS PARTICIPATING IN JANUARY ARRESTS

John Busalacchi, Fred Cook Ruben A. Davis, D. L. Farrar John Gilbert, E. B. Head, P. F Huddleston, Volidia Jones, R. Kennedy, B. P. Le Blanc, Jas. A McFerrin, P. S. Reardon, Edga (Jack) Stanfield, Elton Williams

Forestry Division Has Varied Important Activities

By Massey H. Anderson,
State Forester

Act 90 of 1922, as amended by Acts 71 of 1924, and 153 of 1926, charges the Division of Foreestry with the direction of all forest interests and all matters pertaining to forestry within the jurisdiction of the State. Although forest fire prevention and control has, in the past, been the most serious problem with which we have been confronted, other phases of forestry, such as timber management, assistance to farmers, and the distribution of planting stock, are necessary if the forests of our State are to be perpetuated.

A recent survey of the forest resources of Louisiana showed that, at present, our forests are producing only one half the volume of which they are capable. The main causes of this low production figure are: oft recurring forest fires, and the past misuse of forest lands.

Even though our forests are maintained at this low rate of production, the wood producing industries of the State account for over 39% of all the wage earners employed in manufacturing, and approximately 35% of the money paid in wages by all manufacturing industries. In round figures, approximately fifty thousand persons were paid forty-five million dollars by the forest production in Louisiana last year. These figures exceed those of any other industrial group in the State, and the value of the ultimate forest product is second only to that of agriculture.

In the early days, approximately 0% of Louisiana's acreage was covered with some of the finest stands of virgin timber to be found anywhere in the world. Only ten per cent of these original stands of timber remain. Sixteen million acres, 56% of the total state acreage, still is classified as forest land. This land is, on the whole, neither suited for agricultural or other uses and unless it grows timber, it is non-productive.

Other sources of raw materials supporting industry in Louisiana, such as oil, gas, sulphur, and salt, are gone forever once they are removed. Forest lands can be made to produce continuous crops of wood products when properly protected and managed. Today, in Louisiana, 475 wood-using industries are in operation and are using second growth timber almost entirely. Most of the lumber companies have instituted good forest practices and are growing as much timber as they cut; they will operate continuously in the future. Several large pulp and paper mills are now located in the State. Their raw products are entirely young, second growth timber. All these wood-using industries are operating on the output of only partially productive forest lands. If we can make our forest areas produce more wood products, through forest fire protection and wise management practices, more industry will be attracted to the State, giving permanency to our communities and increasingly larger payrolls.

The Federal Clarke-McNary Law was passed in 1924, providing for Federal, State, and private cooperation financially and administratively for forest fire control and reforestation. The Division of Forestry became active under this law. Last year, $93,000.00 was allotted Louisiana by the Federal Forest Service, and has been increased to $107,000.00 for the present year.

Editor's Note:—The accompanying article on the activities of the Louisiana Division of Forestry, is another in a series of articles being carried by the Conservationist to acquaint the people of Louisiana with the activities of the various Divisions of the Conservation Department.

The article was prepared by Massey H. Anderson, State Forester, Director of the Division.

Previous to the meeting of the last legislature, representatives of the Division of Forestry, the United States Forest Service, and forest landowners met and prepared a new administrative and financial plan for the Division so that it could operate at least on a par with other Southern States.

During the latter part of 1940, the Division was reorganized to comply with the plans adopted by these agencies. Branches of Fire Control, Education and Information, and Management were set up in the Division with technical foresters at the head of each. A section for law enforcement was set up with an experienced man at the head. A property system was established. A more complete system of bookkeeping was put into operation. Plans were laid for an enlargement and modernization of the nursery program. A technical forester with previous experience was employed to manage this program. The Organization of the Division is more complete than ever before and compares very favorably with those standards set up by other Federal and State forest agencies.

MASSEY H. ANDERSON
State Forester

Sixty-five pieces of automotive equipment have been purchased for fire control purposes. Savings in car allowances, mileage, and gasoline formerly paid employees will liquidate this expenditure in two and one-half years. Most of these autos are pick-up trucks and 1½ ton trucks used as fire trucks with the latest type of fire fighting equipment.

Twenty-one technical foresters, graduates of Louisiana State University, have been employed and for the first time Louisiana has a technical staff comparable to other states. (Many of these men are on Military Leave at present.)

Five supervisory districts have been established for more efficient and accurate administration. Two new District Headquarters Units have been established at Hammond and Oberlin, and a residence for the forest Superintendent at Woodworth, all paid for by the C. C. C. and at no cost to the State. A third Unit has just recently been completed at Minden.

A four year program of maintenance and reconstruction of badly delapidated telephone lines (3,200 miles), roads (3,500 miles), and firebreaks (3,000 miles) has been initiated and carried out. An additional 500 miles of line has been constructed.

An extensive educational and public information program, which includes the use of two automotive educational units, operated by graduate foresters, to visit rural areas and schools, is being carried out to prevent forest fires and stimulate a greater interest in better management practices.

In spite of accomplishments during the past three years, there yet remains much to be done. Only a start has been made in the standardization of Louisiana's forestry program. This work must be continued or achievements of the past three years will be lost. Approximately one-half of the forest area in the state yet needs fire protection. Not less than $450,000.00 is needed to protect the remainder. A detailed, statewide plan to provide protection for this area is on file in the New Orleans office.

Management information must be distributed to more and more landowners. The public must be kept informed as to the benefits of good forestry practices and the part they are to play in helping develop our forestry resources. Louisiana's social and economic welfare are largely dependent on the progress that will be made in forestry during the coming ten years.

The State is divided into five Administrative Districts for Fire Control purposes. The fifth District, which constitutes the Mississippi River bottomland hardwood region is, at present, inactive. The other four Districts are as follows:

District #1—Florida Parishes—Hammond

District #2—Southwest Louisiana—Oberlin

District #3—N. Central Louisiana—Olla

District #4—Northwest Louisiana—Minden

The work in each District is supervised by the District Forester who is necessarily a technically trained man, and is recognized for his professional qualifications. All of these men are thoroughly familiar with forestry conditions and problems of the State, and particularly with the forest fire problem. They are familiar with recognized forest fire prevention, presuppression and suppression methods as used by State, Federal, and other forest agencies. They have been educated and trained in all the other general phases of forestry work such as timber management, game management, general nursery and planting practices, utilization, preservation, and forest improvements.

(Continued to Page 6, Column 1)

Louisiana Oil Industry Has Made Significant Gains

Many significant advances for the oil and gas industry have been made during the four years of Sam H. Jones' incumbency as Governor, and the industry in Louisiana today is perhaps better organized and functions more smoothly than at any time in the 40-year history of oil in Louisiana.

Beginning with the Heywood strike in the Jennings field in 1900, Louisiana's oil growth was at first slow, like all healthy growths, then the tempo of leasing, exploration, drilling and production began to quicken.

Not, however, until comparatively recent years, and particularly since the perfection of exploratory methods, has the discovery of new oil pools become almost routine in Louisiana, with a comparatively high rate of discoveries as compared to other oil areas of the United States.

Since 1940, when Sam H. Jones became Governor of Louisiana, the State has been fortunate in having at its head a skilled oil lawyer with a real understanding of the oil business and its countless complex problems. Oil operators in the State have been agreeably surprised to learn that they could "talk oil" to the Governor in his own office and be heard with real understanding.

Landowners and royalty owners, too, have found in the Governor a sympathetic and understanding person, who through years of oil law practice had learned to see things from their standpoint, as well as from that of the producer.

In marked contrast to the turbulent oil exposes in Louisiana during the latter 30's, the industry during the past four years has functioned without the breath of scandal touching any figure in the administration. The State Mineral Board, charged with the duty of securing the most advantageous leases on state-owned lands and water bottoms, has discharged the duties for which it was created with admirable dispatch, greatly increasing the State's revenues from this source.

The Department of Conservation under the Jones administration had as its first Commissioner Major B. A. Hardey of Shreveport, and this appointment by the Governor was one of the most popular choices that could have been made, for Major Hardey combines an enviable reputation for civic-mindedness with an astute understanding of the oil business, from "crown-block to cellar."

Next to head the State's oil-regulatory authority was Joseph L. McHugh of Jennings as Director of the Department of Minerals in 1941. Mr. McHugh gained immediate favor with the industry by the frank and open manner in which he presided at public hearings before his department on oil matters, affording to every interested party, big or little, the greatest leeway in the matter of being heard.

Legislative reorganization having again placed the control of the oil business within the jurisdiction of the Conservation Department, W. H. Hodges of Elm Grove was Governor Jones' choice to head the department. No finer citizen could have been appointed. Ill health forced Mr. Hodges to resign as Commissioner and his death in 1943 brought sorrow to his countless friends made during a lifetime of constructive civic endeavor.

Governor Jones' next move for the proper regulation of the Louisiana oil industry was one which again honored the Director of the Minerals Division, Jos. L. McHugh, who became commissioner in October of 1941 when Mr. Hodges' poor health forced his resignation.

Again displaying the sterling qualities which had registered for him as Minerals Director, Mr. McHugh assumed his wider sphere of activities as Conservation Commissioner with the popular approval of the oil operators and the citizens of the State. Acquainted with the oil business as only a man can be who has risen from the actual field operations of an oil company to the administrative desk, Mr. McHugh is at home in the atmosphere of oil hearings. Widely known throughout the industry in Louisiana, Texas, Arkansas and Oklahoma, and known to hundreds of his fellow-citizens as "Uncle Joe," he has become a familiar figure to senators, congressmen and high governmental figures in Washington for his efforts to secure higher prices for crude oil.

Governor Jones helped Louisiana to its rightful place as one of America's principal oil-producers when he signed the Interstate Compact, shortly after his inauguration. As his representative on that Commission, Mr. McHugh has made numerous trips to Washington and to the other oil states where the Commission holds its meetings, voicing the wishes of the Louisiana oil industry and of the citizens of the state generally in its deliberations. He was recently honored by appointment to the Committee on Regulatory Practices.

When Governor Jones was asked by Harold L. Ickes, Secretary of the Interior and Petroleum Administrator for War, to nominate an outstanding and experienced citizen as a member of his Conference of Petroleum Regulatory authorities, the Governor had no hesitancy in nominating his trusted lieutenant, Joe McHugh. In that capacity, the Commissioner of Conservation has made good, as in all other assignments given by the Governor.

Mr. McHugh is also state co-ordinator of mines for the War Production Board, in Louisiana.

To succeed to the post of Director of the Minerals Division, following Mr. McHugh's appointment as Commissioner, Governor Jones named Harry W. Bell of Shreveport, an able, experienced engineer.

Mr. Bell's technical education and lifetime of service in the oil industry have admirably served him during his tenure of office. He has had as his Chief Engineer during this time Mr. P. S. Ervin, Jr., of West Monroe, a young engineer who had formerly headed the Houma District Office of the Minerals Division.

Dr. John Huner, head of the State Geological Survey, has been another professional man who has done much to bring credit to the State's regulation of oil matters.

During the last twelve months of the 1940-1944 Jones administration, Former Congressman Hale Boggs of New Orleans has served the Department as its general counsel, acting as attorney for the minerals divisions. Here again the Governor made a widely popular choice, for Mr. Boggs had concentrated on the practice of oil law in New Orleans for a number of years. Wise and equitable decisions supported by admirably written orders affecting oil fields have been the rule during the tenure of Mr. Boggs. His decision to join the armed forces December 1, 1943, was received with mingled admiration and regret by the Governor, the Commissioner and his fellow-workers in the Conservation Department. Mr. Boggs now holds a commission in the United States Navy, War Shipping Administration.

Perhaps no other trait has been as much responsible for the gains made by the oil industry during Governor Jones' term of office, as his genius for finding and appointing able, experienced and energetic men to posts of vast importance in the Department of Conservation. This policy has extended down through the Minerals Division to the humblest inspector. Engineers and trained oil men have been chosen to head the Minerals Division's six district offices, scattered throughout the State.

Executives of oil companies in Louisiana have had much to thank Governor Jones for in the matter of enabling the industry to expand and flourish. New capital has been attracted to Louisiana under his administration and prospects are bright for the industry in 1944.

FIVE TREES NEEDED FOR EACH SOLDIER

While sportsmen have long recognized what forests mean to hunting and fishing, comparatively few have a full appreciation of their great importance in the war effort. According to the American Forestry Association, five mature trees are required to equip every man in our armed forces. To quote:

"One tree is needed for his living quarters, mess hall, chapel and recreational facilities. Another provides the wooden crates necessary in shipping him food, clothing, tanks, guns and ammunition. Wood from the three remaining trees is used for making necessary equipment used in waging modern warfare; wood cellulose in high explosives, wood in training planes, wood in gun stocks, shipyards, factories, and many other essential items.

"By the end of 1942 some twenty million trees were said to have been in the war industry, backing up our fighting forces. If these trees were standing 10 abreast and 10 feet apart they would reach from New York to San Francisco."

Therefore it is now not only to the sportsmen's best interests to use care with fire in the woods, it is his patriotic duty! He should use the utmost care in discarding matches, cigarette and cigar butts and pipe ashes. He should build his fire only in a safe place, should watch it constantly and should not leave until it is completely out.

What you don't know about fishing doesn't hurt you, but the way you go about it probably amuses the fish that are watching you.

SPANISH MOSS—LOUISIANA'S LAGNIAPPE CROP

By Lillian King Markland

(Copyright by L. K. Markland)

In a state that is peculiarly essed with such an abundance d infinite variety of natural reurces as to be phenomenal, there nothing more typically "deep outh" or more truly "lagniappe" an Spanish Moss. To families ving in southern rural Louisiana eside picturesque bayou and the rre tremblante of marsh, this ountiful crop of nature is everyhere, free for the taking — ountless tons of it. And so raplly does it propagate that, tho etter than 10 million pounds re garnered annually, the sum otal seems not to diminish by so uch as one whit. In some places s much as several tons have een known to embellish one tree.

The trees hanging heavy with heir burden of haunting beauty ave evoked exclamations of deight from thousands of tourists raveling through the state. To hem the long gray-green festoons uspended wraithlike from mighty aks, or making dense and myserious great swamps of cypress nd sweet gum, mean heart-catchng scenery, not millions of dolars in industry. They stop and ake treasured pictures of the lusive beauty of moss-draped trees mirrored in quiet bayous, of the famed Cajuns around their cabins, or of French-speaking pickaninnies poling a pirogue—all, things that are peculiar to Louisiana alone. The visitor may be reclining comfortably on upholstery of processed moss, but the chances are that he is not aware of it and looks on the lush beauty around him only as something to delight the eye.

Spanish Moss has been called by many popular names, including Southern moss, Florida moss, French Hair, Spanish Beard, and others. The appelations Spanish Beard and French Hair were bestowed by those indomitable early settlers when keen rivalry between the nations was heightened by having the reins of the Government shuttled back and forth between the two. It is said that when some Frenchmen asked the Indians their name for this queer growth the answer was "itla-okla" or tree hair. The Frenchmen, in ridicule of their rivals, informed the Indians that the correct name was Barbe Espagnol or "Spanish Beard."

The Spaniards, not to be outdone, just as gravely told the Indians that the real name of their itla-okla was Cabello Frances or "French Hair." It may have been that the Indians were partial to the French, or that Barbe Espagnol better fitted the Indian tongue than Cabello Frances, or that the French were more convincing. At any rate, the popular name became and remained for a long while Spanish Beard. Only lately was it changed to Spanish Moss.

The botanical as well as the popular name for this plant has undergone a change. It was formerly known as Tillandsia usneoides: Tillandsia in honor of Prof. Tillands, Swedish bontanist, and the specific name of usneoides because it appears "lichen-like." (Don't bother to reach for that dictionary. I quote: "A lichen is a composite organism, consisting of an ascomycetous (rarely basiomycetous) fungus (lichen fungus) living symbiotically with an alga." Unquote. Now you know what a lichen is. Or do you?) This moss is now known botanically as Dendropogon usneoides. Dendropogon is from the Greek: Dendron meaning tree, and pogon, hair, thus completing the circle and taking us back to "itla-okla" (tree hair) again.

Beautiful word, Dendropogon; it grows on one. Like Spanish Moss on a swamp cypress. There is satisfaction, too, in going back to itla-okla, even tho it be in another tongue. Still-and-all, I vote for itla-okla, me.

Contrary to popular belief, Spanish Moss is an air plant or epiphyte, getting its sustenance from the air and water, taking no toll of the tree to which it is attached. It will live and grow in any warm atmosphere where it can get light and air and moisture. Often seen thriving in small patches on light and power wires, it would present a problem to linemen and a menace to the service if it were not for the fact that wires offer no firm anchorage, and when strands do alight there it is usually only until another puff of wind picks them up again and deposits them elsewhere.

Visitors to the Southland often gather a small amount of moss with which to stuff a souvenir pillow, and attempt to dry it in the sun, hay fashion. They wonder why, once it is torn from the parent tree, it does not go the way of all grasses and become dry and lifeless. The most of them, after a period of sunning, become satisfied that they have

(Continued to Page 7, Column 1)

Louisiana's "lagniappe" crop goes to market

FORESTRY DIVISION

(Continued from Page 3)

Each District is subdivided into Ranger units which, in most cases, comprise only one parish. The exceptions are in parishes in which only small areas are under protection. These are added to the parish with which they logically fall from the standpoint of economical and efficient administration. Subordinate to the District Forester, the Ranger is directly in charge of the fire control organization in his unit, which includes the Wardens, Towermen, Mobile Fire Crews, and Maintenance Laborers, when the latter are working on projects or improvements within the ranger unit. The ranger directs and supervises fire control activities under the direction of the District Forester and assists the District Forester in all training activities. The Ranger is responsible for accurate and detail fire reports by all wardens in his area.

There are forty-three State operated lookout towers in the protected areas throughout the State. These towers are located from ten to fifteen miles apart and are connected by telephone communications. They are manned twelve months a year, and it is essential that the towerman live near his station.

In many protected areas throughout the State, Mobile Fire Wardens have been employed to supplement the regular fire fighting organization. These Mobile Fire Crews, consisting of five men, a pickup truck and modern fire fighting tools are being used in areas in which abnormal hazards exist. They have proved to be very efficient and economical in comparison with the resident Warden system since they work as a crew; transportation and equipment are ready at all times during the fire season; and elapsed time between the detection of a fire and arrival of the fire fighters is reduced to a minimum. This system results in smaller fires and a decrease in burned acreage. These crews are stationed at a lookout tower or near a telephone, and are dispatched as soon as the fire is located. In the resident Warden system, a telephone and several miles of telephone line are necessary for each individual warden, whereas in the Mobile Crew Warden system no additional telephone line construction is necessary. The resident Warden system, now in operaiton, requires a majority of the Division's 3,700 miles of telephone lines to afford efficient communication for control of fire fighting and other activities.

Resident wardens are located at strategic points throughout the protected areas and are usually assigned approximately ten to twelve thousand acres each, for fire control. These wardens are connected with the towers and District Office by telephone lines. They are equipped with such fire fighting tools as the fire flap, rake, and back-pack pump.

Maintenance laborers are employed by the day during the maintenance season. Their work consists of maintaining and repairing fire roads, bridges, fire breaks, towers, and telephone lines. Their equipment consists of tractors, graders, fireline plows, dump and stake body trucks, trailers, and miscellaneous maintenance tools and equipment.

Any forestry program, whether Federal, State, or private, is a public venture. Unlike the ordinary type of business, forest properties cannot be locked securely when the day's business is over, and the owner go home to enjoy a good night's rest. Forest properties are vast, extensive, and as they are subject to public enjoyment, likewise they are subject to public abuse. Any forestry program benefits the public at large, regardless of ownership. Aside from the economic values of forest holdings, such as the growing of timber products, and the employment of workers, forests have other benefits: the protection of watersheds and the regulation of streamflow; the provision of food and homes for game and wildlife, recreational value, and range.

In Louisiana, the two chief problems connected with the practice of forestry are forest fires and unwise cutting practices. When these two problems are overcome, the practice of forestry in the State will be highly successful. Both are dependent upon public understanding and attitude.

More than 90% of the fires which occur in Louisiana are caused through carelessness, or incendiarism, which latter word covers both ignorance and indifference. These fires can be prevented, but the public has to be sold on the values of our forests and the ways and means of fire prevention.

The institution of good cutting practices in the harvesting of wood products will largely be achieved when the fire problem is solved. As the public learns more about the value of forests and the necessity for their proper care, the desire to cut timber wisely will also come about.

The program of Education and Information which the Division has set up is designed to accomplish these ends. Our people are willing and eager to learn more about our forest resources and how they can be perpetuated. The Division is using every means to take forestry to the people.

To enocurage the practice of forestry in the State of Louisiana, the Department of Conservation was authorized by Section 11 of Act 90 of 1922, as amended by Act 153 of 1926, to enter into contract with any landowner who owns forest lands denuded of timber, deferring all taxes except a bare land tax for a period not to exceed 40 years. This law is known as the "Reforestation Law'.'

Under the provisions of this law, the owners have been financially able to reforest denuded lands and also grow timber as they were required to pay taxes only on the assessed value of the bare land. In lieu of other taxes a severance tax amounting to 6% of the value of the products severed from the forest must be paid the State when timber is cut from the lands embraced by the contract.

The deferred payment of taxes is, therefore, beneficial not only to the landowner, but to the State of Louisiana as well. Seventy-five per cent of this tax goes to the Parish treasury and twenty-five per cent to the State. In this way the Parish and State accumulate, gradually and over a period of years, the missing ad valorem taxes. Usually, over a period of twenty years, such taxes together with the annual land tax are equivalent, or are in excess of, the amount which would have been paid on both land and timber had no contract been in effect.

In addition to its regular duties, the Division has also been charged with the setting up of fire control systems in and around vital defense areas. These areas might be shell loading plants, ammunition dumps, air fields, bombing and rifle ranges. Although we receive reimbursement from the United States Army for this work, the supervision and responsibility of this job rests with us.

The Interceptor Command asked for and received the full

(Continued to Page 8, Column 4)

Timber stand improvement, selectively cut area along Marion-Huttig gravel road in Union Parish.

SPANISH MOSS

(Continued from Page 5)

lone their part, and proceed to nake their pillow—of the green, iving moss. One wonders how ong the plant manages to survive, ewed into the tight confines of he cloth.

The story is told among the iatives of an outsider, an "étranger," who came to the Cajun noss country and, not being faniliar with the habits of the plant, nade himself a bed of the moss, vithout first curing or killing it. The man found the bed comfortible and much to his liking. Each iight he slept long and soundly. And the moss continued to grow ind multiply rapidement. It grew ind it grew and it grew—until inally it smothered the man igainst the ceiling of his house.

Aside from the fact that epiphytes are rare and little known o the layman, the natural supposition would be that moss is a parasite because its habits and ieeds lead one to suspect the vorst. Moss needs sun and air and full access to rains and no ood value from living trees, and so it will live and grow on dead imbs and trees. The novice, not cnowing that it is an air plant, presupposes that the weighty growth of moss has drunk the sap of the tree, Dracula fashion, leaving the lifeless skeleton standing ghostlike in its shroud of misty gray. The literary genius, Lafcadio Hearn, in his poem "Spanish Moss," pictures the long curling strands as "vampires of the woods," existing on "spectral sap," and called them "vegetable thugs." High brackish water standing overly long in swamps after a storm has killed some trees, natural or man made causes have killed others; and there is much moss found on dead timber. However, the most luxuriant growths are found where there is a partial protection from the drying rays of the sun during periods of drouth, and in very low watery sections where fogs and humidity compensate for the evaporation by the sun.

Since moss is designed by nature to secure its food in great part from atmospheric precipitation, it is found only in tropical and subtropical sections where the rainfall is heavy, and fogs are common. The subtropical climate with a high relative humidity, and the water-covered swamps of southern Louisiana offer the perfect combination for a maximum production of this anomaly, and it is here that more of it is marketed commercially than in any other state in the Union. Though it grows as far north as southern Virginia, along the Atlantic Gulf, and Caribbean coasts to southern Brazil, it is only in Florida and Louisiana that there is a commercial yield, with Louisaina, being far in the lead. Louisiana, with an average annual rainfall of 55.11, claims to be the wettest state in the nation. Fogs, too, are not uncommon, and are manna to moss. When drivers are battling an occasional early morning "pea soup" and coining brand new epithets to give vent to their feelings, the lusty little itla-okla is greedily drinking his fill, storing up this life fluid against days of sun and drouth.

Spanish Moss is not a true moss, but a member of the pineapple (Bromeliaceous) family, a fact that is astounding—to botanists at least. It is considered the most remarkable of all epiphytes. It is not only remarkable, but peculiar. Living moss looks dead and dead moss (cured) doesn't look like moss at all, but like a mass of horse hair. To those innocent of any knowledge of the plant, it appears lifeless as it hangs limp across tree limbs. In fact, moss can look like anything else but a vigorous plant; its appearance can be very deceptive.

A number of years ago, before travelogues in technicolor brought all the world to the neighborhood movie, a lovely young lady mathematician from north of the Mason and Dixon line journeyed to New Orleans to join the faculty of one of the local colleges. As her train sped across the country she viewed with appreciation the scenery to be seen from the train window. When she reached the moss country she was puzzled and amazed by what she saw, and went around asking people what it was. But the ones she asked, like herself, were not familiar with the growth, and could not enlighten her. Arriving in New Orleans the lovely lady was met by another member of the faculty, and the visitor began talking immediately of this strange experience. "And have you discovered yet what it is?" the other teaaher asked. "Oh, yes," came the serious and confident answer. "I've come to the conclusion that it is trash left from the 1927 flood."

Honest-to-goodness, that's what the lady said.

Certainly, from a distance, moss does not look like a flourishing growth. Actually, tho, it has a pale greenish tinge, and is as soft and tender as new shoots in spring.

The moss plant is made up of a long main stem that sometimes attains a length of 20 feet, with small clusters of leaves (usually three) branching off this stem at intervals of an inch or so. Stems and leaves alike are tiny and threadlike, with no difference in their general appearance. Under a microscope the stem shows one vein running through the center, surrounded by the thicker gray-green tissue. The hairlike vein comprise approximately one-fourth of the bulk of the plant, and the tissue three-fourths. In the cured product, the vein is the only part that remains, all the outer tissue decaying and falling away. In the process of curing, chemicals in the growth cause this hairlike core to turn dark brown or black and become wiry and strong.

The leaves, only a few inches in length, differ from the main stem in make-up in that instead of the one center vein they have three smaller veins; otherwise the stems and leaves look and function alike. The outside of each is covered all over with microscopic scales through which the plant absorbs moisture from rain, fog, and dew. Salt necessary for the well-being of the plant is dissolved from the dust of the air or from dust particles that come in contact with the plant or the adjacent tree.

A queer little quirk of the itla-okla is the fact that the long trailing stems spiral in the most unique and intriguing way, the little corkscrew curls reversing themselves every few inches. To attempt to think of a reason for this taxes the imagination.

One of the most unusual features of Dendropogon usneoides is its ability to absorb and retain water. Research has proven that in its natural habitat moss has from 25 per cent to 50 per cent water content. Right after a rain it will have as high as 60 per cent and submersion will result in 75 per cent to 90 per cent. Some living moss was put into a hot oven and killed, and then soaked in water—and absorption rose to 70 per cent in the dead moss.

When placed in a disiccator, in which the air was lower than is probably ever found in nature, the water content of saturated moss dropped to 25 per cent in 14 days. Plants lived 48 days without water. After four weeks of dehydration moss was soaked in water and the most of it became green again, only small parts remaining brown, showing death.

Spanish Moss both blooms and bears fruit. The minute three-petaled brillian green flower that is faintly fragrant at night appears at the base of the leaves in May and June, while the fruit pods mature in the fall. This tiny fruit looks like miniature yellow bananas and hangs on the parent vine until spring, when each pod opens to disclose the plant seeds. The seeds are covered with a feathery down that supports them as they float away on the breeze.

The wide distribution of the plant has been brought about more by the dispersal of fragments of the plants by high winds, and by birds utilizing the soft pliant material to build nests, than by seeds. Some of the seeds lodge in crevices of the bark of trees and become thriving permanent plants, but a large number of them land in water, or on the ground where they germinate and live for a short time and die.

The moss industry is one of the most unique in the world. It is truly "lagniappe," a free and apparently inexhaustible source of income to any and all who will partake. It requires no planting, no fertilization, no cultivation, and not even ownership or tenancy of the land. The harvesting and curing require neither stock nor machinery to accomplish, and ginners will send trucks out to pick up the cured product. Yet the market is never glutted, and there is always a demand for it. The reason for this is that moss gathering is no short-cut to riches. At the most, a man expects to gather about 500 pounds a day, and green moss is worth from 75 cents to $1 a hundred pounds. But the chances are that he cannot sell it green, and will have to keep it several months and cure it, causing it to lose three-fourths of its weight. He will get more for it, but he will have the care of it, and the wait. Also, a moss picker needs to be on the alert for poisonous snakes which infest the marshes, and to know how and where to maneuver his boat to miss stumps and shallows through the myriad labyrinth of bayous that confront him.

Moss picking is carried on by most of the low-income rural population of the moss sections of southern Louisiana. The picker who subsists by moss gathering alone usually builds a tiny one- or two-room shack of discarded lumber hard by a bayou, and as near a highway as possible, so trucks can pick up his moss without too much trouble. He chooses any open space that takes his fancy and moves in, sans deed or owner's permission. His equipment consists of a nondescript flat-bottomed boat that will hold

(Continued to Page 8, Column 1)

SPANISH MOSS

(Continued from Page 7)

a nominal amount of moss, a long pole with crooked tines or long crooked nails in the end to hook the moss from the trees, and a pitchfork to reverse his piles of curing moss. Sometimes he has a few pirogues or other types of small boats to rent to fishermen at so much per hour or day, cane poles from the swamp, and bait from the bayou, with worms from the woods. His house is windowless and screenless, and his furniture is made up of boxes and cast-offs. Wooden shutters help keep the cold out, and smudges can be used to discourage the almost ever-present swarms of mosquitoes. Tho, as a rule, he has evidently become immune to the mosquito bite, and lets them feed on him unmolested. Maybe he has a small garden, chickens and a pig; and maybe he hasn't. It depends on the land around his house, and his energy, both of which are subject to question.

Just as there are different types of farmers elsewhere, from the Lester Jeeter type to the hard working, ambitious farm owner, so there is an ascending scale of moss gatherers. The moss farmer possesses more worldly goods. He has a better home, other sources of income; from farming, trapping, fishing, and/or a part-time job in town. He gathers moss only in off seasons, between his other occupations. He has bigger and better boats, high rubber boots for comfort and protection, and spikes to enable him to climb easily. He is more industrious and ambitious, and produces more and a better quality moss fiber than the moss picker.

Once the moss is gathered, more patience than work is required. Some moss is sold green and the ginners do the curing, but as a rule the dealers prefer buying the cured product and, because of space, time, and trouble, they buy comparatively little green moss. If they did, no picker would ever cure his crop, and the dealer would be swamped with the green product.

Curing takes from two weeks to six months, depending on the method used, the short-time method producing an inferior and correspondingly cheap fiber. The better method of curing is accomplished by the moss gatherers by stacking the wetter moss in piles about 4 feet wide and 4 feet high (to facilitate handling) and as long as space and quantity of moss permits; and allowing the outer tissues to decompose gradually, reworking the moss every 3 or 4 weeks as moist heat is generated inside the stack, pitching the outside moss inside the pile, and the inside portions out. This process usually takes three months, and sometimes longer, depending on the type of moss, and the care given it. The wetter the moss is kept the quicker it cures. When decomposition is complete the hair fiber is hung on fences or wires until it is thoroughly dry, a matter of several weeks. When this is accomplished the moss picker has completed his work and his product is ready for the gin.

The quick method is effected by killing the moss instantly by dipping it in hot water, or pouring on it hot, soapy, or lime water. This "doping" affects the quality of the fiber, and leaves an odor that requires sunning and airing to banish. The experienced moss dealer quickly recognizes the artificially cured product and pays a correspondingly low price for it.

Green moss is worth about 1 cent per pound, and cured moss (moss fiber) from 3 cents to 5 cents, depending on the quality of the hair, the amount of sticks, trash, and other foreign matter in it, and the amount of dampness still in the moss. (Water has been known to be added at the last minute, to boost the weight, there being all kinds of tricks (and tricksters) in this trade, as in all others.)

Some moss pickers have their own trucks and deliver their moss to the gin, but moss dealers send out trucks to collect the moss along the highways, and the most of the sales are made beside the bayous, whether it be in front of the moss gatherer's home, or at a designated spot to which he has paddled his product by boat.

Some trucks carry scales to weigh the moss; others use the old-fashioned and less accurate "box weight," using a wooden box about 3 feet square to measure the moss and judge the weight by the measure.

Workers in the ginnery remove all large pieces of sticks, leaves, and trash from the moss, then place it on the moving belt that carries it into the gin. The gin "combs" the hairlike fibers, and removes other foreign matter, releasing it ready for baling. The baling is similar to the baling of cotton in that it is compressed and wired into a condensed square block, but the bales are made much smaller than cotton, weighing from 125 to 150 pounds. Baled moss is ready for shipping to manufacturers for use.

The use of moss fiber is apparently as old as the state itself. Before the white man came Indians used the long hairy strands to weave into fabrics, dyed them with vegetable dyes and made from them numerous articles of clothing. Both Jacques LeMoyne and Jonathan Dickerson wrote of seeing the dyed moss, plaited into clothing and worn by the Indians. Dickerson, shipwrecked off the coast of Florida in 1697, told of seeing men wear breech-clouts made of a "piece of plait-work of straws, wrought of divers colours." And of other articles of clothing for both men and women, made of the "moss of certain trees."

The Indians probably did no curing, nor needed to, since curing means simply the decomposition of the green outer bark, and this occurs of itself wherever moss is blown from trees and left for a time piled in low damp places. Much of the moss gathered in Louisiana now has already been cured by nature.

The early settlers found many uses for this versatile vegetable fiber. It proved invaluable in making bridles, horse collars and saddle blankets; in stuffing mattresses and pillows, etc. And it has long been used for packing articles for shipping.

Spanish Moss fiber is the most popular fiber for upholstering; it is clean, resilient, and long wearing. Wound into a ball, moss fiber has a surprising bounce—comparable to last season's tennis ball. It is a welcome substitute for springs in mattresses and cushions in these days of steel shortages. The fiber is used in 60 per cent of the better grades of furniture, in upholstering automobiles, airplanes, Pullman seats (And maybe in Jeeps—or do Jeeps have upholstering?)

Recently there was added a new and surprising use for this strange plant — that of chicken food. A New Orleans man brought some of the green moss home and made nests for his chickens—and was nonplussed when he found that the nests had disappeared, until he found that the chickens had devoured them—to the last morsel.

Moss was used extensively during the Civil War as wadding, in the manufacture of shells; it was sold to the Government during World War 1 for the same purpose; and quite possibly moss is being used today in the manufacture of ammunition.

I told my husband these astounding facts. He said, "Oh, yes," laconically. "I knew that. I've pulled a lot of wads apart to see what they were made of. They would string out like moss hairs, and I suppose that is what they were." I wanted to see. I cocked an inquiring eye at a shell on the shelf and said so. "What!" he exploded. I jumped. "And ruin a perfectly good shell?" He picked up the shell and gazed at it fondly. "I might get a duck with that shell," he mused. And quick as a wink he left me and the military use of moss behind and in his eyes plain as the nose on your face there he was in a duck blind at dusk, tense, waiting, waiting. . . . His loaded gun was ready at his shoulder. Suddenly they came, two of them, swiftly swinging their way to the sheltered pond for the night. They dipped lower, lower. . . . The perfect shot. "Bang!" Just one bang: the shell in his hand. "A big French duck," he murmured, as he tenderly placed the shell back in its place on the shelf.

And so whether or not moss wadding is in it that shell at least is still Military Secret No. 999,-999,999¾.

Activities of Forestry Division

(Continued from Page 6)

use of the Division's 3,700 miles of telephone lines. At their request we established a paid A. W. S. and operated this service on a reimbursement basis until a short time ago. Each and every one of our towermen have volunteered their services to continue to report planes. This greatly lessens the number of observers needed in areas where towers are located.

The increased interest shown by the citizens of our State in our work leads us to believe that we have accomplished some of our aims. The introduction of a text book on forest conservation into the schools of Louisiana will be of great value in presenting our problems to the younger generation.

Each day more uses are being found for wood. Each day we realize that we must more effectively bring before our people the importance of our forests, and impress upon all the necessity of protecting this only replenishable natural resource.

PARISHES IN WHICH VIOLATIONS OCCURRED IN JANUARY

Bienville	1
Cladwell	2
E. Baton Rouge	1
E. Carroll	2
Jefferson	1
Ouachita	9
St. Tammany	3
Tensas	4
Total	23